

Meeting the Problems of Rural Life in Manitoba

*A Birds's-Eye View of the Activities of
the Manitoba Department of Agriculture
and Immigration and the Manitoba Agri-
cultural College :: :: :: ::*

APRIL, 1920

FOREWORD

In 1917 this Department issued a booklet entitled "What the Manitoba Department of Agriculture is Doing." Several thousand copies were printed and distributed. The booklet was small, concise and unpretentious. It sought simply to interpret to the public of Manitoba the nature and direction of the activities carried on by the Department.

To quote an old phrase, this little brochure "met a long felt need." A copy enclosed in a letter saved paragraphs, or perhaps pages, of typewritten explanation. It answered many questions that people were asking. But it did more than that; it answered unasked questions and introduced to many citizens Departmental lines of service of which they had previously been entirely unaware. And thus it made for increased Departmental usefulness.

During the three years since 1917, many changes have occurred, even in the organization, plans and outlook of a government department. Perhaps it would not be too much to say that during the past four or five years the work of this Department has expanded fourfold. Naturally, under these conditions the demand for up-to-date information is pressing. And so the need for this present publication has arisen.

Also a definite request for such a handbook has been expressed by a representative organization of Manitoba citizens—the Women's Institutes of Manitoba—at their 1920 convention in Winnipeg. The answer to this need and to this request is now in the hands of the reader.

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Minister of Agriculture
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PROF. S. A. BEDFORD, GEORGE WALTON,
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Weeds Commissioners.

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DOES THE PUBLIC UNDER- STAND?

To those in many lines of business the above is an exceedingly pertinent question. If the public understands the nature and value of the service offered, success may be expected; if not, failure is assured.

Administering the affairs of a government department is a business—a business carried on for the community, presumably for the general benefit of the public at large;—and the success or failure of such a business will, in the very nature of things, depend to quite an extent upon how completely it is understood by the public. Manifestly citizens cannot take advantage of lines of departmental service of which they are not cognizant.

The Manitoba Department of Agriculture realizes also that understanding is the basis upon which sympathy and co-operation must be built. And public sympathy toward, and public support of, departmental activities are absolutely indispensable, if maximum results are to be secured.

The reader is asked to look upon this booklet as presenting only a tentative and, necessarily, very brief account of what is being undertaken. The activities of a department change as time progresses; and no claim is made that perfection has been reached. Each season brings new conditions and new problems; and so fresh

policies are required. In framing these policies, constructive suggestions and criticisms, from whatever source, are always welcome.

This booklet is not intended as a detailed report of work done—only to indicate its general nature, expansion, purpose and direction. Those who wish detailed reports should write their request to the Publications Branch of this Department, indicating the special branch of work upon which the information is sought, as several volumes are issued to cover various phases of departmental activities.

Three Methods of Assistance

In a broad way it may be said that the service given by the Department falls under three general heads, namely:—

1. Direct activities of the Department.
2. Assistance to work organized outside the Department.
3. Suggesting improvements in legislation affecting agriculture.

Under these three general heads the work is discussed in the pages following.

PART I.—DIRECT ACTIVITIES OF THE DEPARTMENT

ENROLLMENT OF STALLIONS

(On this subject address all letters to the Stallion Enrollment Board, Manitoba Department of Agriculture, Winnipeg).

On page 48 several of the main provisions of the Horse Breeders' Act are set forth. Under this Act it is illegal to receive any fee for the service of a stallion not enrolled in the Department. Nothing but stallions of pure breeding may be enrolled. The owner, too, must keep posted at each stable where the stallion is stood a copy of the certificate granted by the Department. Under the Act, stallions submitted for enrollment are examined by duly qualified Veterinary Inspectors; then the reports of Veterinary Inspectors, together with the certificates of pedigree, are reviewed by an Enrollment Board; and, in accordance with the report of this Board, the certificates of enrollment are issued by the Department.

It can truthfully be said that never before were the interests of the horse breeding public of Manitoba so well safeguarded, in so far as the breeding and merits of the stallion are concerned, and the principles of the Manitoba Act are being copied in other Provinces.

The Department asks the public to bear in mind the fact that the owner of an un-enrolled stallion who undertakes to collect service fees not only has no legal claim to such fees but he is open to punishment if he accepts them.

DAIRY WORK

(On this subject address all letters to the Dairy Branch, Manitoba Department of Agriculture, Winnipeg).

Recent years have shown more clearly than ever before Manitoba's immense capabilities in the production of dairy products, and the wonderful field which lies before us for development. With this in mind, the Government, three years ago, established the Dairy Branch, for the very definite purpose of assisting and encouraging this line of agriculture, that this important industry might be built along permanent and staple lines.

The Dairy Branch carries on these activities:

- (a) Administration of the Dairy Act.
- (b) Assisting in organizing and establishing new creameries and cheese factories.
- (c) Inspection of creameries and cheese factories by qualified instructors and inspectors, and assisting and advising cheese and buttermakers regarding the most up-to-date methods of manufacture.
- (d) The regulation, inspection, and licensing of all cream-buying stations, as well as the examination and regulation of operators; also the licensing of cheese and butter-makers.
- (e) Assisting in arranging provincial and inter-provincial competitions among the manufacturers of dairy products, for the purpose of standardization.
- (f) Developing the dairy industry by the holding of meetings, as well as by issuing bulletins, reports and other educa-

tional literature, and placing pure bred dairy sires wherever possible.

(g) Grading of creamery butter manufactured in the province, and the issuing of certificates regarding its quality, as well as assisting in marketing when requested.

(h) Research along dairy lines.

(i) Correspondence on dairy matters.

During the past three years excellent results have been obtained in regard to increased production and improvement in quality of our dairy products. Those interested have shown a commendable attitude and whole-hearted spirit in co-operating with the Dairy Branch.

Through our grading system it has been possible to standardize our creamery butter and to place on the market uniform grades, which are so essential in building up and meeting the requirements of the trade both at home and abroad. Manitoba creamery butter is now recognized as the equal of any creamery butter produced on the continent, and has commanded top prices wherever offered. This could not be said a few years ago.

The following are grade standards for creamery butter:

Special grade must have a minimum of 94 points and a minimum for flavor of 41 points. First grade must score from 92 to 94 points and must score a minimum for flavor of 39 points. Second grade must score from 87 to 92 points and must score a minimum for flavor of 37 points. All creamery butter coming below the latter score is designated "off grade".

Largely through the efforts of the Dairy Branch of this Department, Manitoba creamery operators some years ago adopted a system of grading the cream as received from farmers. There are three grades with a difference of three cents per pound butter fat between grades 1 and 2, and two cents between grades 2 and 3. The result has been that the average of the cream coming from the farmers has been greatly improved in quality with a consequent increase in the returns to the farmer and a very large increase in the production of the highest grade of butter.

Some idea of the remarkable growth of the creamery industry in Manitoba in the last few years may be gained from the following figures:

Imports

| Year | No. of Carloads | Value |
|------|--------------------|---------------|
| 1912 | 55 | \$ 343,960.00 |
| 1913 | 35 | 201,600.00 |
| 1914 | 20 | 142,720.00 |

Exports

| | | |
|------|-----|--------------|
| 1915 | 50 | 324,800.00 |
| 1916 | 68 | 472,192.00 |
| 1917 | 96 | 827,904.00 |
| 1918 | 175 | 1,764,000.00 |
| 1919 | 153 | 1,814,000.00 |

The total value of all dairy products produced in Manitoba for the year 1919 amounted to \$16,789,892.51.

At the Canadian National Exhibition, Toronto, Manitoba creamery butter for two

years in succession and in competition with all Canada, has won the championship cup for highest scoring butter shown.

THE "COW SCHEME"

(On this subject address all letters to Purchasing Agent, "Settlers' Animal Purchase Act", Manitoba Department of Agriculture, Winnipeg).

On page 53 reference is made to the Settlers' Animal Purchase Act. This Act, drafted by the present Minister of Agriculture and passed by the Legislature in 1916, was at first heartily laughed at by many people. But it has admirably served its purpose and has already completed a great deal of the work it was primarily intended to accomplish, and those who laughed at its inception are now among its warmest admirers. Between Lake Manitoba and Lake Winnipeg is a large tract of territory chiefly valuable as a live stock and dairy country. But thousands of the homesteaders who went there could not afford to buy cattle to stock their lands. This Act was drawn to help them do so without financial drain upon the Province.

As was intended and expected, the number of cows requested has lessened each year since the first full season's operations, the calves from those taken in increasingly filling the needs of the farmers for a greater number of animals. In a year or two this part of the country, instead of asking for cows, will be shipping out trainloads of steers and immense amounts of butter. The numbers of cows distributed have been as follows:

| | |
|---------------|-------|
| 1916-17 | 2,117 |
| 1918 | 1,715 |
| 1919 | 738 |

Since the inception of the scheme, nine butter factories and two cheese factories have been erected in the districts where the cows have been delivered; also several other evidences of prosperity could be cited. The amount of creamery butter manufactured in these localities has increased three-fold since the commencement of the scheme, and milk companies of Winnipeg inform us that they are receiving much larger quantities of milk from the railway lines running through the country where these cows have been placed.

It is estimated that on a conservative basis the 4,570 cows delivered by the Department have already given to the farmers there a progeny of over 10,000 animals.

LIVE STOCK CONSERVATION

(On this subject address all letters to the Live Stock Branch, Manitoba Department of Agriculture, Winnipeg.)

On page 11 we tell of the work under the Settlers' Animals Purchase Act." In addition to this, a great deal of live stock work of a conservation nature is carried on. In 1917, when the war demands for meat were so urgent, it was decided to do everything possible to arrest the movement southward of thousands of stocker cattle, while we were not utilizing many thou-

sands of acres of wild pastures in Manitoba. The idea was adopted, therefore, of loaning at 7% interest a certain amount of money to be expended upon these cattle, the Department in every case passing upon the animals purchased and branding them before they left the stock yards. The plan worked successfully, attained its object, made money for the borrowers and paid its own way. Anticipating the after-the-war world shortage of live stock, the Government in 1918 also started what was known as its Conservation of Heifers plan, which had very marked results. In 1919 the whole movement was consolidated and put upon a more permanent foundation under the new "Live Stock Purchase and Sale Act."

While the figures which follow are very satisfactory in themselves, they tell only part of the story. The fact is that the spectacle of the Government lending money to support the live stock trade has served a most useful moral purpose; farmers who have been only luke-warm in regard to live stock conservation have come to realize that if a business is profitable on borrowed money—as so many borrowers proved it to be—it must be even more profitable if conducted without borrowed money. And so there was sent back from the Winnipeg Stock Yards, in 1919, a total of over 42,000 head of cattle (as against 9,700 in 1915) Manitoba alone absorbing 25,000 of this number.

The figures following show how the Department helped the movement in a direct financial way:

| | |
|---------------------------------|--------|
| | Cattle |
| Under stockers and Feeders Plan | |
| 1917 | 1,292 |
| Under Stockers and Feeders Plan | |
| 1918 | 2,901 |
| Under Conservation of Heifers | |
| Plan, 1918 | 1,528 |
| Under Live Stock Purchase and | |
| Sale Act, 1919 | 1,410 |
| | <hr/> |
| Total cattle | 7,130 |
| | |
| | Sheep |
| Under Live Stock Purchase and | |
| Sale Act, 1919 | 757 |
| | <hr/> |
| Total sheep | 757 |

WEED ADMINISTRATION

(On this subject address all letters to the Weeds Commission, Manitoba Department of Agriculture, Winnipeg.)

There is scarcely anything related to the agriculture of any country which is more vital and important than the control of weeds. At the same time weed control, from the standpoint of public administration, is one of the most difficult and unsatisfactory matters to deal with. This is particularly true in an area such as Manitoba, where farming methods are on the extensive, rather than on the intensive, scale, and where many of the easier agricultural practices of the past impose little or no restriction upon weed distribution and multiplication.

So urgent had the weed situation become that at the 1916 session of the Legislature the Noxious Weeds Act was thoroughly overhauled, and a much more heroic and systematic plan of campaign was launched. The gist of the present regulations is presented on page 51 of this booklet.

Since 1916 Manitoba has had three Provincial Weed Commissioners, who are charged with carrying on the educational work in regard to weeds, the inspection of seeds being sold by dealers, the supervision of the work of municipal weeds inspectors, and the other general features of the campaign. The Act requires of each municipality that it appoint a local weed inspector. In 1919 a total of 191 such inspectors were at work.

A few of the results that have been attained during the four years that the present plan has been in vogue may be stated as follows:

1. The Perennial Sow Thistle, which threatened to over-run the whole province, was hunted for and found in many scores of municipalities where its presence had formerly been unsuspected. From quite a number of those localities where it had started only in patches it has been eradicated entirely.

2. Toad Flax, which had crept into many parts of Manitoba unnoticed and was spreading in an insidious way, was detected, attention was drawn to it, and its progress halted.

3. Russian Thistle, a very bad tumbling weed, received almost undivided attention during the autumn months of 1919, when,

owing to weather conditions, it appeared in many municipalities in a very menacing way.

4. Wild oats have been fought by eradication methods so as to reduce them perhaps by 50 per cent.

5. Thousands of enquiries regarding Couch Grass have been answered.

6. The Weeds Commission and the Municipal Weeds Inspectors have distributed many thousands of bulletins and circulars regarding weeds.

7. From time to time newspaper articles have been published indicating special phases of the situation that were pressing at the moment.

8. The detailed reports of the inspectors as sent annually to the Weeds Commission constitute a weed history of the province, farm by farm, showing just where the plague spots for any weed are located, and the spread or otherwise from year to year.

9. Railroads, large corporations and land companies have been dealt with as never before.

10. The process of education on weeds and their spread has been carried on through meetings, lantern talks, and in other ways until the better classes of farmers are all asking for more vigorous enforcement of the Act.

11. The status of weed inspector and the average level of ability for this work has been elevated greatly.

The difficulties of conducting this work have been increased ten-fold because of the war. Now that men are becoming more

plentiful, it will be possible to attain greater results.

The Provincial Weeds Commission will be glad at any time to identify weeds sent to them, to supply copies of the Weeds Act, and to furnish information as to the enforcement of the law or as to methods of weed eradication.

CO-OPERATIVE WOOL MARKETING

The great advantages of co-operative wool marketing have now been abundantly demonstrated in Manitoba; and the Department feels that, in the natural progress of affairs, this is one of the movements that is now able to stand pretty well upon its own feet.

Prior to 1915 no such thing as co-operative wool selling was known in Manitoba. Under the method previously prevailing of each farmer selling his wool, ungraded, to the local dealer, prices were more or less chaotic, and loss through bad methods of handling sheep and wool, due mainly to lack of information, was inestimably great.

Then the co-operative movement was organized. In this the Dominion Live Stock Branch joined hands with this Department. At once Manitoba farmers were offered the following advantages:

1. Expert advice as to the care of sheep and wool. In this connection it may be said that the Manitoba literature upon the

care of wool has been of a very high and useful character.

2. Grading of all fleeces by an independent and expert grader.

3. Centralized selling.

During 1916 and 1917 the Department sold the wool directly. Then at the beginning of 1918 there was organized among the wool growers of Canada a co-operative body known as the Canadian Co-operative Wool Growers Limited,—a producers' selling body for the wool of all Canada—and it was arranged, with the concurrence of the sheepmen, that sales be effected through this concern. Thus during 1918 and 1919 the Department supervised the gathering of the wool; it was graded in Winnipeg; and the Department forwarded it to the Co-operative headquarters at Toronto to be sold. In 1920 the whole business is in the hands of the co-operative company, and the Department feels that its past work has assisted in effecting a great improvement in the grade of wool being produced and in placing the co-operative wool movement upon a stable basis.

Considerable correspondence on this subject still passes, and the Department retains an active interest in improving the quality of Manitoba wool, and seeing that it is marketed in the best way.

AGRICULTURAL LITERATURE

(On this subject address all letters to the Publications Branch, Manitoba Department of Agriculture, Winnipeg.)

One of the branches of this Department that has developed wonderfully, both in scope and usefulness, during the past four years has been the Publications Branch. In fact, the preparedness of this Department to meet the Soldiers Settlement movement at the close of the war has been so outstanding that Manitoba is constantly being asked to help by its literature the work of training soldier-farmers in almost all parts of Canada.

One outcome of the war has been that many men have changed, and many more are changing, their occupations. "Soldiers' Settlement,"—"Soldiers' Civil Re-establishment"—these are only two of the current phrases of the process of fitting men into niches which they have never before occupied. Thousands of returned men are turning to farming as a life work, and these men are all calling for reliable agricultural literature prepared by those who are able to speak with authority on the various phases of Manitoba farming and rural life.

Quite independent of this demand, too, there is naturally in Western Canada a very great call for farm literature. Agriculturally, as geographically, our situation is unique, and imported agricultural literature is almost valueless; there remain still many problems to work out; and newcomers are constantly taking up farming in our midst.

To meet the heavy demand for bulletins which will carry to the country the best instruction that agricultural science has to offer, the Publications Branch of this Department has been organized. Each year this Branch supervises the printing of about one-half million pieces of mail matter.

Many of the bulletins circulated are written by members of the staff of the Agricultural College, the Department doing its part in the way of bearing the expense of publishing, illustrating and distributing in effective and orderly fashion. It is to be remembered that when a bulletin is written, the work of getting the information to the public is only half done; the bulletin has still to be illustrated, supervised as to printing, proof-read, and then distributed to all the thousands of persons who shall make individual request for it. Centralization of these activities, especially of distribution, is imperative. In addition to the College bulletins, a number of reports, news articles, posters, and publications deal with matters relating directly to the affairs of the Department.

The activities of this Branch may be listed as follows:

1. Editing, illustrating, having printed and circulated bulletins, circulars, reports, posters and leaflets.
2. Placing advertisements in newspapers regarding public meetings, enforcement of Acts, and various other matters of departmental concern.
3. Supplying the press with news matter of agricultural interest.
4. Preparing and having printed forms used in the work of the Department.

5. Taking photographs of agricultural subjects.

6. Compiling and supplying crop information.

Four years ago a modern mailing machine was installed, and lists are maintained which enable the Department to carry on its work of distribution in a thoroughly up-to-date manner.

Manitoba was one of the first provinces of Canada to realize the advantages of establishing such a branch in the Department of Agriculture; one by one other provinces are adopting the idea.

By writing this Branch, Manitoba citizens can obtain lists showing what bulletins are available for distribution.

CROP INFORMATION

(On this subject address all letters to the Agricultural Statistics Branch, Manitoba Department of Agriculture, Winnipeg).

During the war people learned, as never before, to study the sources of food supplies. The habit thus intensified is, however, a natural characteristic of civilization. And so constant demands are made upon the Department for information as to acreages sown to various crops; yields per acre, not only in the province as a whole, but also in separate districts; numbers of live stock and of poultry; dairy products, wool, honey, and other classes of farm products. Then there is a demand for data as to the extent of fall plowing and summer fallowing; numbers of men and women employed

on farms; wages paid; value of buildings erected; value of farm lands, etc.

The Department's activities in relation to crop information divide themselves into these three classes.

1. Compiling and supplying data as to acreages sown each year.

2. Keeping posted in regard to, and circulating information as to how the crop and the agricultural situation generally is progressing throughout the season.

3. Gathering and distributing final information as to the production of the year.

During the past two years this work has been put on a basis whereby the Dominion Government and this Department act co-operatively. This has resulted in the compiling of more accurate returns than formerly, and has done away with the confusion which accompanied separate estimates covering the same area.

Under the present system each individual farmer is asked to report upon his own acreages and live stock; and at the close of the year reports as to outturn of crop are gathered from a very large staff of crop correspondents—each man reporting only for his own township.

Free crop reports are sent to all persons making application.

BEE KEEPING

(On this subject address all letters to Beekeeping Branch, Manitoba Department of Agriculture, Winnipeg.)

One of the natural crops of the Province that is already grown and is waiting only to be gathered is the honey crop. The in-

dustry is expanding rapidly, and each season brings to the Department an increasing number of enquiries as to where bees may be purchased.

A few years ago quite an amount of infectious bee disease had been introduced into Manitoba, and it was spreading, destroying several apiaries; but through the inspection under the Department and the enforcement of the Foul Brood Among Bees Act, conditions as to bee health have so greatly improved that the Province is now practically free from infectious bee diseases.

During the past few years several other lines of bee work have been prosecuted by the Department, and the results of these have been incorporated in a bulletin, just off the press, "Bee-keeping in Manitoba," which may be had on application to the Publications Branch.

DEMONSTRATION FARMS

(On this subject address all letters to Demonstration Farms Board, Manitoba Department of Agriculture, Winnipeg.)

Because of the pressure of war problems, the establishment of provincial demonstration farms in Manitoba has been handled in a conservative way. Up to the present the only two such farms being conducted are those at Killarney and Birtle. It is hoped gradually to increase this number.

The Provincial Demonstration Farm is intended to perform a different work from that done by the Dominion Experimental Farms at Brandon and Morden. Under the

Dominion Experimental Farms system experiments may be conducted all the way across a continent. The Department hopes, however, to conduct practical demonstrations in a more intimately local way; to subject many conclusions to a more rigid commercial test than is given at the Experimental Farms; and to maintain these demonstration farms on a more pay-for-your-upkeep basis. It is hoped to secure accurate data as to the cost of producing various kinds of crops, and of performing specific farm operations. In addition, the Demonstration Farms should prove valuable local centres through which the activities of the Department and the needs of the local community can come into vital contact.

The affairs of the demonstration farms is directed by a Demonstration Farms Board of three members.

ANIMAL BRANDS

(On this subject address all letters to the Live Stock Branch, Manitoba Department of Agriculture, Winnipeg.)

On page 44 reference is made to the improvement in legislation relating to animal brands. Brands are of value only in proportion to the protection which they offer to the owners, to the practicability of the whole scheme involved, and to the care with which the records are kept in the Government office. Perhaps the value of the system is reflected fairly well in the figures below:

| | 1914 | 1919 |
|---------------------|------|------|
| Brands issued | 35 | 317 |

GAME CONSERVATION

(On this subject address all letters to the Game Branch, Manitoba Department of Agriculture, Winnipeg).

As knowledge increases it becomes rapidly more clear that one of the great natural resources of any nation are those forms of wild life—animals and birds—that are of economic value. Manitoba has been remarkably well blessed in this respect, and as the wild life of other parts of the continent becomes extinct, and as furs become scarcer and rapidly more expensive, the importance of taking good care of the species that are worthy of protection will become more and more apparent. The addition, a few years ago, of the new territory added to the north of the Province has very greatly increased our game resources, and, at the same time, enlarged the work of game protection.

The financial importance of this provincial resource may be gathered somewhat from the fact that during 1919 licenses were issued to the following numbers.

| | Resident Non-Res. | |
|-------------------|-------------------|----|
| Big Game | 5,124 | 27 |
| Game Bird | 5,153 | 35 |
| Trappers | 2,079 | 17 |
| Fur Traders | 488 | 5 |
| Dog Trainer | 1 | 3 |

This is to be considered together with the further fact that the revenue accruing to the Province in 1919 through the work of the Game Branch was \$38,368.18. In addition to this revenue from licenses and confiscations, there must be added the im-

mense value of all the furs taken under license and sold by the trappers—possibly amounting in the aggregate to millions of dollars.

Up to the present year the Game Branch of the Department of Agriculture has administered and enforced the Game Protection Act and Insectivorous Birds Act. A change of policy is now being inaugurated whereby the enforcement of the Acts, as well as several other Provincial Acts, is being centralized in the Provincial Police Branch of the Attorney-General's Department.

The issuing of trappers' and shooters' licenses will still be vested in the Department of Agriculture.

GRASSHOPPER CONTROL

(On this subject address all letters to the Deputy Minister of Agriculture, Winnipeg.)

In 1919 the south-western corner of Manitoba, in common with a large area in Saskatchewan and North Dakota, was visited by a plague of grasshoppers. The general strike in Winnipeg began shortly after the outbreak commenced to assume dangerous proportions, and this embarrassed the movement of express parcels of material needed in fighting the insects. But as soon as the outbreak started representatives of the Agricultural College and Department of Agriculture were sent to the municipalities involved, meetings were held, information as to the insects was given, local councils were interviewed, poison mixture formulae were published, central mixing places for

poison bait were established, and demonstrations given in applying the poison mixtures to the fields. In the fall of 1919 placards were distributed and advertising placed in the papers directing such control measures as the highest entomological authorities have to offer.

The Department is prepared for quick action in case another outbreak occurs in 1920.

EXTERMINATION OF GOPHERS AND CROWS

It would be hard to find anybody anywhere who might be counted as a friend of the gopher. Among the destructive rodents of Manitoba he easily enjoys first place, and the loss due to his devastation has been enormous. During 1917, 1918 and 1919 a "drive" upon this enemy of the farmer has been carried on through the Boys' and Girls' Clubs, being financed by the Government. The following numbers of gophers were destroyed:

| | Number | Cost |
|------------|---------|--------|
| 1917 | 43,461 | \$ 869 |
| 1918 | 94,506 | 1,890 |
| 1919 | 500,000 | 17,260 |

During 1919 another enemy of the farmer—the crow—was destroyed under bounty to the number of 400,000. Thus some of the rat holes through which the profits of the province were leaking have been stopped.

PROVINCIAL EXHIBITS

During the past three or four years Manitoba has received much favorable advertising because of the magnificent provincial exhibits that have been placed by the Department at the International Soil Products Exhibition. In addition to the publicity won at these shows, most successful results have been attained in a less conspicuous way in other directions.

At the International Soil Products Exhibition at Kansas City in 1919 Manitoba's exhibit occupied a space 85 feet long, 10 feet deep and 12 feet high.

All of the grains, vegetables and fruits included in the exhibit were grown by Manitoba farmers. They were of such profusion and excellence that the thousands of visitors that passed through the gates daily formed an entirely new conception of Manitoba as a food-producing area, and as having a climate that permitted many of the tenderest kinds of vegetables to mature fully.

Altogether at this exhibition Manitoba won 7 beautiful trophies, 35 first awards, 25 seconds and 22 thirds.

Both in 1918 and 1919 Manitoba won first honors as having the most artistic display shown by any state or province, and the cup for showing the best collection of vegetables. Also in 1919 we captured the cup for finest exhibit of small grains and second award for collective agricultural exhibit. Other distinctions are too numerous to mention in detail.

In addition to exhibits of our resources outside the province, excellent results have

been attained in connection with the annual exhibit of educational value put on each year at the Brandon Exhibition, and the National Soil Products Exhibitions in Winnipeg. The amounts of money awarded in prizes by the Department at the last named exhibition is shown herewith:

| | |
|---------------|--------|
| In 1914 | \$ 829 |
| In 1919 | 1,916 |

AGRICULTURAL REPRESENTATIVES

(On this subject address all letters to the Extension Service, Manitoba Department of Agriculture Winnipeg).

In 1914 Agricultural Representative work had not been started in Manitoba. In April, 1915, six men were placed in the field.

Before the end of the year the call for men for overseas service was so great that all these either enlisted or resigned to take the place of enlisted men on the home farm. It was not until the close of the war that any serious effort was made to replace them.

At present seven men are stationed in different parts of Manitoba. These men represent the Department of Agriculture in their district and co-operate with a local Board of Agriculture in determining what work requires to be done in the neighborhood. The Representatives' work has to do mainly with Boys' and Girls' Clubs, Seed Exchanges, Live Stock Exchanges, Field Demonstration Work, Insect Control, etc.

The Department pays the salary of the District Representative up to \$1,800, also his automobile expenses, amounting to approximately \$1,000 per year. The local community pays the additional part of the salary and provides office accommodation and stenographic help.

As the work of the representative becomes known his services are in great demand, and new districts are being supplied as rapidly as men with the required training and practical experience can be obtained.

The list of Agricultural Representatives follows:

In charge of the work for the Province—

J. R. Bell.

Portage la Prairie—E. G. Wood.

Brandon—C. A. Weir.

Virden—W. E. Watson.

Deloraine—T. A. Johnson.

Morden—F. R. Hall.

Dauphin—Chas. Murray.

POULTRY WORK

(On this subject address all letters to the Extension Service, Manitoba Dept. of Agriculture, Winnipeg)

In addition to the splendid poultry work carried on at Manitoba Agricultural College, a vigorous line of poultry encouragement work is conducted throughout the Province. The entire time of one man is thus spent, with an extra man during the winter. Poultry lectures are given before Agricultural Societies, Women's Organiza-

tions, Boys' and Girls' Clubs, Normal School Classes and other gatherings. Incubators are demonstrated in schools. Poultry plants are inspected, non-layers culled out, and flocks scored as to quality and management. During 1919 over 400 flocks were inspected with a total of nearly 15,000 birds.

TRAVELLING LIBRARIES

(On this subject address all letters to the Extension Service, Department of Agriculture, Winnipeg.)

During the past few years there has been a keen demand for reading matter, particularly in the rural districts from organizations connected with the Department of Agriculture and Immigration, such as Women's Institutes and Agricultural Societies, and a few months ago a start was made in providing travelling libraries. Twenty-four cases were made and fifty books sent out in each. There is a large waiting list of organizations, and a very keen interest is being taken.

The books are loaned free, with the exception of a nominal fee of \$2.00, which about covers carrying charges on the books.

PROMOTION OF AGRICULTURAL TRADE

(On this subject address all letters to the Deputy Minister of Agriculture, Winnipeg.)

One branch of the Department's activities which it is impossible to tabulate in any way, but which demands a great deal of

time, energy and attention is that of directing persons to available sources of seed grain, feed, and all manner of farm supplies. Several lists of breeders, growers of pure seed, etc., are kept in the office of the Deputy Minister, and buyers and sellers are constantly being brought into contact. This is one phase of the Department's activities that is bound to increase as time goes on.

EMPLOYMENT

(On this subject address all letters to the Employment Service of Canada, (Manitoba Branch), 439 Main St., Winnipeg.)

During the war, when the mobilizing of human power to meet the pressing problems of the day became insistent, it was realized that government efforts, in so far as they related to the problem of employment, should be more concentrated, more thorough-going and more co-ordinated than hitherto. Out of this conclusion there developed the Employment Service of Canada, with branches in the various provinces.

The Employment Service of Canada is a Dominion-wide organization. In each province its offices are under the joint auspices of that particular province and the Dominion Government. It seemed to become very evident during the war—and it is probably equally true at all times—that no province, of itself, can settle the labor problem satisfactorily. It frequently happens that while there is a surplus of workers in one part of Canada there is a keen shortage in another province. The varia-

tion in local crop conditions from season to season is alone sufficient to produce this result. A Dominion-wide organization, with a system of constant reports from all parts, can find positions or necessary help, as the case may be, if these are being offered anywhere in Canada.

Previously the labor market was exploited by many private employment agencies whose work was conducted with varying degrees of honesty and satisfaction. Under the present system these private agencies no longer exist, and no person seeking work has to pay anything for the privilege of knowing about any position that is open; the service, both to employers and employees, is absolutely free.

All classes of labor are handled by the Service—professional, commercial, agricultural, domestic, laborers—everything. There are divisions for women as well as for men.

During the first ten months of operation over 57,000 placements were made through the Manitoba offices, and of these over 17,000 were farm hands. Offices are maintained in the following places in Manitoba: Winnipeg (several offices, each dealing with special branches of the work), Brandon, Portage la Prairie and Dauphin.

The present system of handling the employment work of Canada, is more or less in the experimental stage; some of its weaknesses are being discovered and corrected. It is believed that the organization is along sane, progressive lines, and that even already a considerable advance has been made.

CORRESPONDENCE

One of the lines of activity that is steadily on the increase is that of answering letters written by farmers, and otherwise keeping in touch with them. Thousands of enquiries are answered each month; and farmers are invited to make enquiry upon any matter upon which the Department may be expected to possess or be able to avail itself of information.

In addition to this, it is a fact that the correspondence addressed to the Department by the business interests is also steadily increasing. In these days of more and more need for a mutual understanding this fact is encouraging.

MISCELLANEOUS

In addition to all the above, the Department directly carries on a few miscellaneous lines of work, such as issuing of marriage certificates, keeping of records, administration of other minor Acts, etc.

Miscellaneous figures reflecting growth of Extension work:

| | 1914 | 1919 |
|------------------------------------|------|--------|
| Lectures (Miscellaneous) | 20 | 20 |
| One Week Schools ..... | .... | 75 |
| Attendance ..... | .... | 29,000 |
| Institute Meetings | 16 | 250 |
| Attendance | 800 | 14,000 |
| Motion Picture Machines used ..... | .... | 11 |
| Film; used ..... | .... | 150 |
| Stereopticons used ..... | .... | 7 |
| Lantern Slides used | 25 | 2,000 |
| Bromides used ..... | .... | 150 |

Part II.—ASSISTANCE TO ORGANIZED GROUPS

The activities outlined in the previous part of this booklet are all centred in, and practically all confined entirely within, the Department itself. But in connection with the work of several organizations we come into a realm where the major portion of the activity is local and voluntary, and yet which requires to be generally supervised, co-ordinated and aided by provincial funds. The function of the Department in such a case is to provide a workable, equable basis which will not only encourage and organize local effort but will also conserve to the province the widest measure of value which may issue from such lines of work. Those activities indicated below may be taken as representative of this class.

AGRICULTURAL SOCIETIES

As indicated on page 42, the Act governing Agricultural Societies was entirely recast in 1917, and so some comparisons between the results which were obtained in 1919 and those five years earlier will be of interest.

The new Act offers a much more equable financial encouragement than was offered before, as is shown by the following:

Under the Act in Operation in 1914

How the old Act operated on the average Society, paying out in Cash Prizes \$1,000.00:

\$1.00 for membership up to \$150..\$ 150.00

Prizes:—

75% of amount from \$150 to \$300. 112.50

50% of amount from 300 to 500 .. 150.00

25% of amount over 500 to 1,000. 125.00

Total\$ 537.50

Under the 1917 Act

\$1.00 for membership up to 200 ..\$ 200.00

60% of total prize money 600.00

Total\$ 800.00

or an advantage to the Society of \$262.60.

On larger Societies the difference is even greater in proportion, as the total for a Society paying out \$2,000 in cash prizes

Under the old Act would be\$ 787.50

Under the New Act would be 1,400.00

or a difference of\$ 612.50

Other Activities

The above has reference only to the summer fair as an activity. Below we show how the Act reacts upon other activities of the Society. The percentage shown is the percentage of the money paid out by the Society that will be actually refunded by the Government.

Amount of Assistance granted by Government under—

| | 1914 Act | 1917 Act |
|------------------------------------|--------------------|--------------------|
| Seed Grain Fairs | 66 $\frac{2}{3}$ % | 66 $\frac{2}{3}$ % |
| Field Crops Com- petition | 66 $\frac{2}{3}$ % | 66 $\frac{2}{3}$ % |

| | 1914 Act | 1917 Act |
|-------------------------|----------------|-------------|
| Plowing Matches | Special Grants | 60 % |
| Good Farming | Special Grants | 60 % |
| Dressed Poultry Shows | Special Prizes | 60 % |
| Live Poultry Shows | None | 60 % |
| Summerfallows | None | 60 % |
| Horticultural | None | 60 % |
| Magazines | None | 33 1/3 % |

How It Works Out

| | No held 1914 | No held 1919 |
|-----------------------------------|--------------------|--------------------|
| Summer Fairs | 68 | 73 |
| Seed Grain Fairs | 39 | 46 |
| Field Crops Competition | 0 | 25 |
| Plowing Matches | 23 | 25 |
| Good Farming Competitions | 2 | 3 |
| Poultry Shows | 16 | 50 |
| Summerfallows | 0 | 18 |
| Horticultural Shows | 0 | 6 |

HOME ECONOMICS SOCIETIES OR WOMEN'S INSTITUTES

Much of what has been said about the Department in its relation to the Agricultural Societies might be repeated under the Home Economics Societies heading, but with this exception—that the Home Economics work calls for smaller Government grants and is more distinctly along educational and sociologic lines.

Liberal financial aid to the Extension Service has enabled that institution to carry

on very active work in co-operation with the Home Economics Societies.

The present Act gives the Institutes a voice in their organization and management and places them on a definite financial basis.

Although the year 1919 was a very difficult one in which to carry on this work, owing to the influenza epidemic, the Winnipeg strike which immediately preceded the district conventions, and the reaction of the war, during which time the Societies had done such magnificent and strenuous war work, still the following figures will speak for themselves of the growth of the work:

| | 1914 | 1919 |
|----------------------------|------|--------|
| Number of Societies | 17 | 120 |
| Membership | 750 | 4,800 |
| Dressmaking Courses | ... | 109 |
| Attendance | ... | 20 000 |
| Millinery Courses | ... | 75 |
| Attendance | ... | 15,500 |
| District Conventions | ... | 13 |
| Attendance | ... | 3,200 |
| Cookery, Canning | 20 | 300 |
| Attendance | ... | 15,000 |
| Judging (Days) .. | 45 | 125 |

BOYS' AND GIRLS' CLUBS

Manitoba is the pioneer province of Canada in Boys' and Girls' Club work and in 1916 had double as many members as all the rest of Canada combined.

To-day there is a club in practically every rural and town school in the province, with

a total enrollment of 31,000 members. Club work gets better financial support from the Government in Manitoba than in any other province. In addition to providing for Club organizers, judges for all fairs, monthly bulletins of instructions and prize cards, entry tags, posters etc., for the fairs, the Department of Agriculture provides prize money to the extent of \$14,500. Boys' and Girls' Clubs, therefore, are now on a definite financial basis, as with the Agricultural Societies.

The educational value of the Boys' and Girls' Club work is now universally recognized. The projects set are practical and diverse, and they issue in an improvement of agricultural and home making methods.

The following comparative figures are of interest:

| | 1914 | 1919 |
|-------------------------------|------|--------|
| Number of Central Clubs | 7 | 230 |
| Number of Branch Clubs | 30 | 1,200 |
| Number of Members | 730 | 30,000 |
| Number of Fairs held | 22 | 208 |

EXTENSION SCHOOLS

Manitoba is a pioneer in this work. In 1914 no schools were held while in 1919 schools extending over a period of one week were held at 315 places with an enrollment of 9,559 and an aggregate attendance of over 106,000. The table following shows the growth:

| Year | | Number of Schools | Total Enroll- ment | Number of Sessions | Aggregate Attendance |
|------|-------|-------------------------|--------------------------|--------------------------|-------------------------|
| 1914 | .... | None | | | |
| 1915 | ... | 23 | 1480 | 272 | 11,300 |
| 1916 | .. .. | 219 | 6938 | 2196 | 57,903 |
| 1917 | .... | 250 | 7860 | 2250 | 82,000 |
| 1918 | ..... | 307 | 8165 | 2552 | 91,517 |
| 1919 | .. .. | 315 | 9550 | 2876 | 106,350 |

The growth in numbers of schools sought by local districts and in attendance of students is the most conclusive evidence possible as to the practical worth of this work.

INSTITUTE MEETINGS

In order to make the institute meetings more attractive as well as more realistic, 10 motion picture machines were purchased and 150 films, mostly on agricultural and educational subjects provided. These films are non-inflammable and as the machines (Pathescopes) are small, they can be used in school houses and halls at places where there are no picture houses. The use made of the films is to get the crowd out. The pictures are shown during the first hour, while the audience is assembling. During the past winter a total of 944 films were shown to over 21,000 people.

As several of the films were photographed at the Agricultural College, Brandon and Portage la Prairie fairs, they are of keen interest to every audience.

LIVE STOCK AND OTHER ASSOCIATIONS

In addition to financing the lines of work enumerated above, the Department also assists certain other incorporated Associations that are organized for the improvement of agriculture along special lines. Among these may be named the Manitoba Horse Breeders' Association, Manitoba Cattle Breeders' Association, Manitoba Sheep Breeders' Association, Manitoba Swine Breeders' Association, Manitoba Horticultural and Forestry Association, Manitoba Dairymen's Association, Manitoba Beekeepers' Association, Manitoba Poultry Breeders' Association, Winnipeg Poultry Association, Manitoba Grain Growers' Association, and Manitoba Winter Fair.

PART III.—AGRICULTURAL LEGISLATION

The passing of legislation is the direct duty of the legislature, but, in so far as it affects agriculture, it is the duty of the Department of Agriculture to seek to suggest improvements and to bring about an intelligent observance of the laws existing. While it is quite impossible in so small a compass to give any Act in full, the following brief summary of some of the Acts will prove of much value to the farmers reading it:—

SOME MANITOBA LEGISLATION ESPECIALLY AFFECTING FARMERS

Agricultural Societies Act. (1917)

During the year 1917 an entirely new Act respecting Agricultural Societies was passed. This Act provides definitely for the encouragement of many lines of agricultural enterprise not previously indicated as among the work of the Agricultural Societies.

The following activities are now definitely indicated as the work of these Societies: (a) Holding exhibitions; (b) Seed grain fairs; (c) Standing crop competitions, (d) Good farming competitions, (e) Horticultural shows; (f) Live or dressed poultry shows; (g) Plowing matches; (h) Summer fallow competitions; (i) Importing or owning pure-bred live stock; (j) Providing for the circulation of literature relating to any of the objects mentioned in this section; (k) Offering prizes for essays relating to agriculture; (l) Taking approved action to eradicate animal, insect and weed pests; (m) Co-operating with other organizations already in existence in promoting the progress of any branch of agriculture; (n) Importing and otherwise procuring seeds and plants of new and approved specimens; (o) Carrying on experiments which have for their

object improvement in methods of agriculture; (p) Holding meetings for the delivery of lectures and discussion of subjects connected with agriculture.

Provision is made that legislative grants shall be paid on several bases, these relating to the membership of the Society, the number of its activities, the amount of money actually paid out in prizes, the number of pure-bred male animals kept for breeding purposes; the expenditure of money for agricultural periodicals, the expenses of speakers.

ANIMALS ACT (Amended in 1919)

The Animals' Act covers several points of importance.

Under this Act it is illegal to allow animals to run at large as follows: Stallions, 1 year old or upwards, at any time of year; Bulls, over 9 months old, at any time of year; Rams over 4 months old, from August 1st to April 1st; Boars over 4 months old, at any time of year. Penalties: Stallions, rams and boars, \$10 to \$25; bulls \$25 to \$50.

This act also covers the liability of drovers in relation to driving off other people's cattle.

ANIMALS DISEASES ACT

Happily, action under this Act has not frequently been necessary in Manitoba. Its principal purpose is to safeguard the health of animals, and to enable effective action to be taken to stamp out any outbreak of infectious disease.

BEE-KEEPERS' ACT (1915)

One of the industries of Manitoba which until recent years has largely been neglected has been that of bee-keeping. This Act provides for the incorporation of

the Manitoba Bee-Keepers Association, with a view to enabling the apiarists of Manitoba to promote their mutual interests.

BRAND ACT (Passed in 1919)

Several years ago an act was passed providing for the registration of cattle brands. This was found, however, not to be adaptable on any large scale; and so in 1919 it was repealed and an entirely new act, providing for branding both of horses and cattle, was passed in its place. The new Act not only provides for the registration of brands, but also covers such matters as venting, reallocation, changes in brands, sales of branded cattle, etc. Severe penalties are provided for the misuse of brands and vents. It is entirely unsafe to brand animals with an unrecorded brand. The allocation of brands is conducted by the Department.

DAIRY ACT (1915)

This Act, which was passed to keep pace with the development in the dairy industry, is divided into 3 parts. Part 1 deals with the incorporation of creameries and cheese factories; Part 2 deals with sanitation and operation; Part 3 with the Manitoba Dairy Association.

Part 1 defines the number of shares that must be subscribed before an association may be formed to operate a factory; requires approval by the Department of the site and plans, and prescribes certain regulations for the government of business.

Part 2 says, "The building and premises of every creamery and cheese factory shall be kept in a sanitary condition satisfactory to any dairy inspector appointed under the provisions of this Act." Another provision is: "All material entering into the manufacture of butter and cheese shall be clean and wholesome, and the methods employed in manufacturing shall be sanitary."

Other provisions cover the methods of handling dairy products, the manner of making tests thereof, the duties and rights of the dairy commissioner and dairy inspectors, the power of the Minister to close a factory which is improperly conducted, etc.

Under Sections 38 and 39 it is required that every creamery and cheese factory shall be licensed before it may be operated. Section 41 says: "No person shall sell milk in this province for consumption as such containing less than $8\frac{1}{2}$ per cent. of solids, not fat, or less than $3\frac{1}{4}$ per cent. of butter fat; and no person shall sell cream for consumption as such containing less than 18 per cent. of butter fat.

The Act provides for the branding of dairy products according to quality and according to whether or not they are factory or dairy made.

DEMONSTRATION FARMS (1917)

In 1917 there was passed an Act known as the "Demonstration Farms Act." Under this Act it is hoped to increase the number of demonstration farms in the province; at present the only provincial demonstration farms are located at Killarney and Birtle. The farms will be used to secure accurate data as to the cost of producing various crops, performing specific farm operations, etc., a branch of agricultural intelligence that so far has not been put on a very definite footing in Manitoba.

The work of the demonstration farms is directed by a Demonstration Farms Board of three members.

FARM IMPLEMENT ACT (1919)

The purpose of this Act is to put the implement trade of Manitoba upon a stable and well regulated basis.

Implements are divided into two classes, "Large implements," such as engines 5 h.p.

and over, grain separators, engine plows and engine disks, and "Small implements," such as mowers, binders and other farm machines costing \$30.00 and over.

Dealers must annually file with the Department lists of implements offered for sale with price lists of same. In the case of engines, the power must be indicated. Similar lists, with prices, are to cover repairs. Sales must not be made above list prices. Sale contracts are to be in writing, and these are to be read and explained to purchasers before being signed. Unless the sale is for cash, the vendor, as well as the buyer, must sign the contract. The contract forms to be used are prescribed in the Act, and these forms present certain guarantees which the seller and buyer must make. These cover such matters as the efficiency of the implement to do its work and the stocking of repairs at indicated places. Other provisions of the Act are as to lien notes, repossession and sale of implements, right to reject implements under certain conditions, etc.

In 1920 the Act was amended to protect purchasers against having second hand parts placed in machines which are sold as new ones. Unless the machine is sold as a second hand one, any implement containing second hand parts may be returned to the dealer, and the money paid, together with interest, must be refunded and the sale cancelled.

FOUL BROOD AMONG BEES (1914)

The most threatening evil to the industry of bee-keeping is that of communicable disease. This Act aims at its prevention. A few years ago bee disease became spread to some extent among Manitoba apiaries. Under this Act such control measures were exercised that today bee diseases are practically unknown in Manitoba.

The Act deals with the duties and powers of an inspector of apiaries.

GAME PROTECTION ACT **(Amended in 1920)**

Year by year changes occur in the situation in regard to game protection; and so amendments to the Game Protection Act have been required annually. Probably those covering the most new ground to be passed for several years have been the amendments of 1920.

Several of the leading provisions of the Act may be summarized briefly as follows:
Sunday shooting is prohibited.

No open season for female Big Game or animals under one year.

No permit for Big Game shall issue after the season opens.

All Big Game hunters shall dress in white.

No trapping of Game Birds permitted.

Weapons being carried on vehicles must not be loaded.

Shooting from vehicles prohibited.

Boats propelled by steam, gasoline or electricity prohibited in hunting waterfowl.

Selling of carcasses of game animals (except heads and hides), also of birds, prohibited.

No shipping of game from province except on permits.

All fur dealers must be licensed.

Poisoning of game prohibited.

Chasing of deer by dogs prohibited.

The first purchaser of any raw skin of the following classes must pay royalty upon it, as follows: Black Fox, \$10.00; Silver Fox, \$10.00; Cross Fox, \$3.00; White Fox, \$3.00; Red Fox, \$1.50; Fisher, \$3.00; Marten \$3.00, Beaver, \$2.00; Otter, \$2.00; Mink, 75c; Bear, 75c; Wolverine, 50c; Skunk, 20c; Weasel, 5c; Rat, 15c; Wolf, \$2.00; Badger, 10c; Lynx, \$1.75. These royalties are paid by purchasing coupons from the Department; these coupons to be kept attached to the skin until it is shipped out of the province or dressed, the coupons being assigned to the Department in exchange for a permit to export, tan, or take other action in disposing of a raw skin.

HOME ECONOMICS SOCIETIES ACT (1916)

During the war the Home Economics Societies did a work of conspicuous national service. At other times, however, their work is of almost equal importance. This Act outlines the objects of the movement, provides for organization of local societies, qualifications of membership, meetings, appointment of officers, duties of officers, supervision of societies by the superintendent of the Extension Service, assisted in the general direction of the societies by an advisory board composed of the president of the Agricultural College and four young women elected at the annual convention.

In order to enjoy the advantage of a common name for the same movement throughout Canada, the Manitoba Home Economics Societies, in 1919, decided to change its name to the Women's Institutes of Manitoba.

HORSE BREEDERS' ACT (1916)

The Horse Breeders' Act of Manitoba is one of the most advanced, if not the most advanced, act of its kind in the world. A few of the principal provisions are:

The owner of any stallion offering for public service must obtain from the Department of Agriculture, annually, a certificate of enrollment. Every importer or breeder, before offering a stallion for sale, must enrol him. Every stallion enrolled must be eligible to be registered as a pure bred animal.

The enrollment is conducted by the Department and is based upon reports of the Stallion Enrollment Board. To furnish expert information to the Board upon each individual stallion, travelling veterinary inspectors are employed. The inspectors visit different parts of the province, inspect stallions and report to the board.

Stallions are enrolled in grades "A", "B", "C", and "D".

"Schedule A is made use of for stallions of recognized pure breeding, which have been examined and considered worthy as to breed type and conformation, and found to be free from unsoundness of a hereditary nature, as set forth in the Act. This statement is embodied in the enrollment certificate issued.

"Schedule B is made use of for stallions of recognized pure breeding, which have been examined and considered worthy as to breed type, but found to be affected with one or more forms of unsoundness set forth in the Act. Indication of the exact form of unsoundness is embodied in the enrollment certificate issued.

"Schedule C is an interim certificate of enrollment, which may be used for stallions of recognized pure breeding and considered to be somewhat unfavorable otherwise, but which are required for temporary service in outlying districts, or until better stallions become available for use in the district.

"Schedule D is also an interim certificate of enrollment made use of for stallions of recognized pure breeding, for which applications for enrollment have been received, but which are awaiting examination by the Inspector. Upon examination being made, and the inspector's report received and considered, certificate of enrollment is issued in the form of schedule A, B, or C, as the case may require.

The Act provides for lien on foals to secure the fees for the service of the stallion.

INSECTIVOROUS BIRDS ACT (1917)

This new Act prohibits attempts to catch, wound or destroy any of the insectivorous birds known as bobolinks, catbirds, chickadees, cuckoos, flickers, flycatchers, grosbeaks, humming-birds, king-

lets, martins, meadow-larks, night-hawks or bull-bats, nut-hatches, orioles, robins, shrikes, swallows, wax-wings, whippoorwills, woodpeckers, wrens, or any other perching birds which feed chiefly on insects; also any of the migratory non-game birds known as auks, auklets, bitterns, fulmars, garnets, grebes, guillemots, gulls, herons, jaegers, loons, murre, petrels, puffins, shearwaters and terns, or any other non-game bird, whether resident or migratory except as in this Act provided.

Also the destruction of nests and the taking of eggs are prohibited.

Regulations are imposed as to exporting privileges.

One section of the Act states that eagles, falcons, goshawks, sharp-shinned hawks, duck-hawks, pigeon-hawks, coopers or chicken-hawks, crows, ravens, blackbirds, rusty grackle, purple grackle, and English sparrows are not among the birds protected by this Act.

LIVE STOCK PURCHASE AND SALE ACT (1919)

The purpose of this new Act is to enable the Department of Agriculture to assist farmers who wish to increase the numbers or improve the quality of animals kept—horses, cattle, sheep, swine and goats.

Credit to farmers securing animals under the Act must not exceed three years, nor be for more than 75% of the purchase price of the animal. The Government secures its account by a lien on the animals and their offspring. The animals are branded.

Entire male animals sold partly on credit are all to be pure bred and registered.

Male animals may be sold by the Government to agricultural societies.

NOXIOUS WEEDS ACT

(Amended in 1920)

In 1916 this Act was thoroughly overhauled and the noxious weeds work of Manitoba put on an entirely new basis.

There are now two classes of noxious weeds—Class 1 and Class 2. Class 1 includes aggressive weeds,—those that are distinctly self spreading. These are the Perennial and Annual Sow Thistle, Canada Thistle, Russian Thistle, Tumbling Mustard and Toad Flax. Class 2 includes Common Wild Mustard, Hare's ear Mustard, Wild Oats, French Weed or Stink Weed, False Flax, Giant Rag Weed, Dwarf Rag Weed, Blue Bar, Blue Lettuce, Prickly Lettuce, Berberis Vulgaris (commonly known as barberry bush), and Couch or Quack Grass.

Quite different powers are delegated to those in authority in regard to dealing with these two classes.

Briefly, it is the duty of every land occupant to cut down all weeds of class 1 growing on his land, and to rid one-half the width of the roadway adjoining his land of classes 1 and 2. Municipal councils are responsible for weeds upon non-taxable lands, and railroads for weeds on their right-of-way.

Owners of threshing machines must clean their machines, wagons, etc., after threshing on one farm and before moving to the next.

Municipal councils must appoint weed inspectors for a period of not less than four months each summer, and the Act outlines the duties of these inspectors.

Under the Act the Minister of Agriculture appoints Provincial Weed Commissioners (three Commissioners have been employed during the past four years), whose duty is to see that the municipal inspectors carry out the provisions of the Act, examine seed sold in stores, conduct educational campaigns in relation to weeds, etc.

POULTRY BREEDERS' ACT (1919)

Under this Act the Manitoba Poultry Breeders' Association is incorporated. Provision is made for the organization of local poultry breeders' associations. Government grants to the local associations are set by the Act. Such a local association holding a winter show may receive 60% of the prize money actually paid out, but in no case to exceed \$500.00 to one local association.

PRODUCE DEALERS' ACT (1919)

This Act requires each produce dealer in Manitoba to be annually licensed and bonded to the extent of at least \$3,000.

The term "produce", as used in the Act, means any agricultural products or farm produce except grain; and the term "produce dealer" means a person who within Manitoba by himself, his clerk, servant or agent as his principal business buys or sells any produce or receives any produce for sale either on commission or for account or credit of the consigner.

An account must be opened in the dealers' books covering each consignment of goods received. Whenever all or a portion of a consignment is sold the dealer shall, within 7 days, render to the consignor a statement showing (a) what portion of the consignment has been sold; (b) the price received therefor; (c) the date when sale was made.

The Act provides for investigation by the Minister upon complaint.

ACT TO ENABLE MUNICIPALITIES TO BORROW LIMITED AMOUNTS OF MONEY FOR SEED GRAIN PURPOSES

This Act has been passed at each recent session of the legislature when it has been decided that its operation was re-

quired in order to enable any municipality to assist farmers to obtain seed grain. The Act permits the Provincial Treasurer to loan certain moneys for this purpose and regulates the way in which the municipalities shall advance the credit to those entitled to receive it.

SETTLERS' ANIMAL PURCHASE ACT (1916)

This Act was designed to assist the settlers in certain portions of the Province, notably that part between Lake Winnipeg and Lake Manitoba. Under the Act farmers residing within the specified areas may apply for and receive cows on credit. Purchasers are organized into groups of ten members each, and each member is responsible to a fixed extent for the credit of all other members of the same group.

Interest at the rate of 7% is charged by the Government upon all unpaid balances, and the term of payment must not exceed 5 years. The animals are branded and liens are held by the Government upon the original animals and their offspring. Also a charge is taken against the borrower's land. Right to repossess under certain conditions is held by the Government. Not more than five animals are to be delivered to any one settler at any one time.

The settler must not kill, sell or otherwise dispose of unpaid for animals except by consent of the Minister.

SHEEP PROTECTION ACT (1917)

This Act is to protect the owners of sheep against loss from worrying by dogs.

Section 5 reads:—

"(1) Subject to the next following subsection, any person may kill any dog which he finds straying between sunset and sunrise on any farm whereon sheep are kept.

"(2) No dog so straying, which belongs to or is kept or harboured by the occupant of any premises next adjoining that part of any highway or land which abuts thereon, nor any dog so straying either when securely muzzled or when accompanied by or being within reasonable call of its owner or of any person having the charge or care thereof, shall be so killed unless there is reason to believe that such dog, if not killed, is likely to pursue, worry, wound or terrify sheep on such farm."

Within six months of sheep being worried, a police magistrate, on request, may summon the owner of a suspected dog and deal with the case according to law. The dog may be ordered killed, and damages may be recovered by the sheep owner.

When the sheep owner is able to establish the damage, but is unable, because of unascertainability of the ownership of the dog, or otherwise, to collect damages from the dog owner, the council becomes responsible for payment of two-thirds of the amount ordered by the police magistrate to be paid.

Provision is made for appointment of sheep valuers.

Ignorance of the sheep damaging propensities of a dog does not lessen the liability of the dog owner.

THRESHERS' LIEN ACT

Amended in 1917

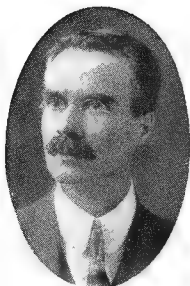
This Act gives to a thresher the right to retain a quantity of the grain threshed by him, for the purpose of securing payment for his work. Also the Act protects those employed by the thresher by enabling them within 10 days to file a claim with a farmer for wages or repairs earned or done in connection with the threshing of the farmer's grain. The Act was amended in 1917 to make the right to lien include fuel.

WOLF BOUNTY ACT (Amended in 1917)

The Wolf Bounty Act, which provides for the payment of a bounty of \$5.00 for each timber wolf and \$2.00 for each prairie wolf, or coyote, killed in the Province, was amended to make this bounty applicable to animals killed in the unorganized territory of the Province south of the 53rd parallel of north latitude.

The person killing animals is required to produce the head or pelt with the ears on before a commissioner for taking affidavits or a justice of the peace, or a police magistrate within the Province, and, on making a statutory declaration or affirmation according to the Act, will receive a certificate on which the bounty will be paid by the provincial treasurer.





J. B. Reynolds, M.A.

President, Manitoba
Agricultural College

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THE MANITOBA AGRICULTURAL COLLEGE

By J. B. REYNOLDS, M.A., President

The business of the Agricultural College has developed in response to the demands which the people have made upon it. That the College has grown to its present dimensions from a comparatively small beginning less than fifteen years ago, is a proof of several important features of Manitoba country life. It is a proof of the intelligence of the people, and their appreciation of an education fitted to their needs. In the steadily increasing correspondence of the College, there is proof of the desire of the farming community for expert information which the College should be able to furnish. The increase in our research undertakings is a proof that many important problems of farm management have been pressing for solution.

The College business may best be considered under three heads:

1. Tuition.
 2. Research.
 3. Extension.
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TUITION

The problem has been to know the college constituency, that part of Manitoba life which the College is especially created to serve. While as a public institution all

classes of the community are entitled to those services which the College is fitted to render, the College motto "For Farm and Home" expresses the particular fields which have been appropriated.

In the survey of the constituency it was found that no single program or course of studies would suit the varied needs of those who wanted to come to the College. Some wanted special training in special lines,—farm engineering, gardening, live stock management, poultry-keeping, cooking, sewing, housekeeping and country life problems. Some could spend only a month, other two months, others six months, some two years and some five years.

To meet these various needs, special courses are offered varying in length from two weeks to four months, and regular courses of two years and five years.

Special Courses

For those who have not the time nor the means to follow any of the regular courses, a selection of special courses is offered.

1. A four months' course in Agriculture, specializing in Animal Husbandry, Field Husbandry and Farm Engineering. Students may enter for this course on October 21st and conclude on March 5th, or enter on January 6th, continue until March 5th and conclude the following December. Unit 20 to 40. Tuition fee \$40.00.

2. A five months' course in Home Economics, with special emphasis on cooking, sewing, dressmaking, millinery, laundry and household management. November to March. Unit 20 to 40. Tuition fee \$30.00.

3. A two months' course in Agricultural Engineering, including some instruction in Field Husbandry and Animal Husbandry,

and specializing in Farm Machinery and the care and operation of Gas Engines. Twice a year,—November and December; January 6th to March 5th. Unit 20 to 40. Tuition fee \$30.00.

4. A ten weeks' course in Dairying offered to those who wish to become proficient in milk-testing, butter-making and cheese-making for factory work. January 6th to March 17th. Unit 20 to 30. Tuition fee \$30.00.

5. A six weeks' course in Poultry Husbandry with instruction in hatching, feeding and rearing chicks; judging; breeds; selecting good producers; preparing for market; selecting and packing eggs; housing, feeding and management. January 6th to February 17th. Tuition fee \$20.00.

6. A two weeks' Rural Leaders' Course in July or August. Ministers and their wives in rural charges form the greater number of those in attendance at this course, although anyone interested in rural community work is invited to attend. The course consists of lectures and demonstrations on popular phases of agriculture and home economics and on the sciences related thereto; demonstrations on gas engines and automobiles; rural leadership, and community organization. Usually an outside lecturer of some prominence is secured to give part of the course.

7. A four weeks' Teachers' Course in July, offered under the auspices and with the co-operation of the Department of Education. The object of this course is to enable teachers to improve their efficiency in teaching special branches, such as domestic science, nature study, manual training and elementary agriculture.

8. Special courses for Returned Soldiers; Tuition fee, \$10.00 a month.

(a) A four months' course, which a candidate may commence at the beginning of any month. This course consists of one month in Field Husbandry and Animal Husbandry, one month in Dairy, Poultry and Horticulture, and two months in Farm Engineering.

(b) A four weeks' course in milk-testing, judging of dairy products, and dairy inspection for men who wish to qualify partly as sanitary inspectors.

(c) Apprenticeship in gardening, poultry, and animal husbandry. A limited number of men can be accommodated with instruction combined with practical work in any of the branches mentioned for the purpose of following these branches as specialties, either as employed men or in their own business. The length of these apprenticeships will depend upon aptitude and previous experience.

In the year 1919, there were in attendance altogether in these short courses, 662 students, of whom 173 were returned soldiers taking work given specially for them.

Regular Courses

There are four regular courses, that is, courses extending beyond one winter in length. There are a three-year course in agriculture and a two-year course in Home Economics, leading to a diploma in each division. There are five-year courses in Agriculture and Home Economics, one leading to a degree, called Bachelor in the Science of Agriculture, and the other to a degree called Bachelor in Home Economics, both conferred by the University of Manitoba.

In all the regular courses, the subjects taught fall into three divisions:

- a. Academic.
- b. Agriculture.
- c. Home Economics.

Academic: The academic subjects are so called because they are subjects common to high schools and universities. These subjects include: Bacteriology, biology, botany, chemistry, English, entomology, history, mathematics and physics.

The purpose of teaching these subjects at an agricultural college is two-fold. Agriculture in more ways perhaps than any other industrial art has to do with nature and natural laws. It has to do with heat, light and moisture; with mechanics and motor power. It is concerned with the composition of soils and foods, with animals and plants, the laws of their reproduction and growth, and their habits and uses. Agriculture is not only an art, it is a business, and history and economics assist the student of agriculture to conduct his business intelligently. Home Economics makes use of the same sciences in a different way. The good housekeeper becomes a better housekeeper through an understanding of the laws of light and ventilation, of the composition of foods, of the quality and uses of textile fabrics; of the structure and functions of the human body, and of the nature and causes of disease. A study of the history of home life reveals the importance of the family as a social unit, and leads to an intelligent interest in other problems of society that are considered in sociology.

Hence a study of these subjects is not only of technical value, but of cultural value as well. The aim is not to make farmers and housekeepers merely, but intelligent and public spirited citizens. Hence it may be observed that the subject of English is taught in every term of the regular courses. While the arts of speaking and of writing are taught directly by exercises, the subject of English does not end there. The best English authors are studied, with the full assurance that the study will bear fruit

in enriching the language and the thoughts of the students.

Agriculture: The subjects taught under this head include: Animal husbandry, field husbandry, dairying, farm engineering, horticulture, poultry, farm management (including farm accounting, marketing, banking, credits), rural sociology, and veterinary science.

The extent of the technical knowledge, and the diversity of practical skill that a farmer can effectively use may seem large to anyone used to the minute subdivision of labor in other industries. Few farms are so large as to permit of specializing in labor, or to afford a manager who is not also an operator. Besides, the isolation of the farm makes it impracticable to employ the mechanical trades for the many small odd jobs of repair and alteration that require to be done about the farm. And so the typical farmer is his own engineer, his own manager and worker, his own carpenter and sometimes his own veterinary surgeon. He cannot know too much about his machinery, about soil management, about the peculiarities of different crops, about the nature and habits of the weeds that infest his land, or about the feeding, breeding and care of his live stock. If he is to succeed financially as she deserves to succeed, he must know something about markets and transportation. He must also lay out his farm and plan his work for economy and efficiency, and so he must know something of farm management.

The aim of the courses in agriculture is to supply as much of this knowledge and

skill as possible in the time allowed and in the circumstances of the winter season. Most of the students come to the College from farms where the chief product is grain. The courses given seek not only to give them a better understanding of the problems of grain production, but also to widen their interests and to diversify their activities when they return to their farms. The advantages of dairy farming, of poultry raising, of sheep and hog and beef cattle on western farms are pointed out, with the best methods known for making these branches of farming a success.

The farmer and his family have to live, which is more than making a living. He lives better if his home and his surroundings are comfortable and pleasing. To this end some instruction is given in house planning and house building, in the choice of a location for the farm home and in the beautifying of the grounds.

All the courses aim principally to making practical, intelligent, successful farmers, and good citizens. The short courses and the three year course go no further than this. The degree course aims further to train men for professional agriculture, for the many opportunities for public service in journalism, agricultural research and agricultural teaching.

Home Economics: The College should rather be called The College of Agriculture and Home Economics. Soon after the college was inaugurated to teach agriculture, it was found advisable to include Home Economics in the curriculum.

The most obvious business of any agri-

cultural college is to teach the art and the science of production to students in attendance at the college. It is soon discovered, however, in carrying on an agricultural college and in responding to the demands of the people who have a right to look to the college for information and direction, that production is only one of the questions in which an agricultural college must be interested and well-informed. There are business questions of farm management, marketing, credit, banking and tariff which the farmer wants to understand. There are problems of country life, since the farmer has not only to make a living, but to live, in the country. The farm is not only the business location, it is also the place of residence of the family, and not only the farmer himself, but his wife and family, are concerned in the work and management of the farm, and the conditions of living which it affords.

Evidently an agricultural college, therefore, must concern itself with teaching more than the art and science of production. The relation of the farm and the home has had the logical effect of establishing an alliance of agricultural science with home economics, within the curricula of most colleges that started out to teach agriculture alone.

The aim of the course in Home Economics is to supply science and some practice in the subjects relating to the duties of the home. With the advance of agricultural training in any community comes the demand for scientific and practical education in the chief of all industries for women—that of home-making.

It is being realized more clearly every day that the home is the centre of the best in life, not only of the individual, but of the community; and this realization calls for practical and systematic training in the business of home-making. The average woman is responsible not only for her own well-being, but in the majority of cases for the physical, moral and intellectual well-being of other members of the family.

House-keeping has been given a place among the professions, and to fit women of the Canadian West for the great work which devolves upon them in the development of the country, and to give them an intelligent working knowledge of those things which are vital in their work in the home, the courses in Home Economics have been planned.

Instruction is given in the fundamental principles and practice of foods and cooking, in the interior and exterior arrangements of the healthful home; home management, the health and general well-being of its inmates; textiles and fabrics; the making of women's and children's clothing and millinery; and in dairying, horticulture and poultry raising.

In response to a request from students who have completed the Homemaker course to be permitted to continue their studies in Home Economics, the Board of Directors, at their meeting on May 21st, 1915, decided to extend this course so that a student might proceed to the degree of Bachelor of Home Economics by completing a course of five winters of five and one-half months each or the equivalent.

This course qualifies for teaching domes-

tic science in the schools, when the requirements of the Educational Department in teacher-training have been satisfied.

The Institutional Management course covers three winter terms of five months each. This course is designed to prepare mature students, who have the health and executive ability, for directing institutions, such as college and school dormitories, or managing lunch rooms, cafeterias for philanthropic or commercial purposes, or for acting as dietitians in hospitals.

EXPERIMENT AND RE- SEARCH

The Manitoba Agricultural College for some years after it was founded limited itself almost entirely to teaching. It was apparently a fully considered and deliberate plan in its management to limit the college to the teaching function, and not to embark upon the business of establishing an experiment station. Doubtless this decision was wise. To establish at the beginning an experiment station, fully equipped, along with the college, would have involved initial expenditures greater than the Government or the Legislature at that time would have agreed to. The amount of land secured for the college at the Tuxedo site was little more than one hundred acres outside of the grounds occupied by the buildings. Here apparently was no room for experiments in grains, grasses, clovers vegetables, fruits, rotations, and all the problems of live stock and crop and soil management and improvement.

The College a bureau for answering

questions: As the college became known it was found that more than students were interested in it, and more demands were made upon it than to lecture in class-rooms. Farmers and prospective farmers began to ask questions which they very naturally expected the college to be able to answer. They asked about the character of the soil and the climate and the chances for success in a given district. They asked what fruits could be grown in Manitoba, and how to grow them. They asked if certain feeds grown on the farm were sufficient for fattening cattle or for producing milk. They asked how to get rid of sow-thistle and twitch-grass and wild oats. They sent samples of tainted water and noxious weeds and diseased plants to be analyzed and identified and diagnosed. They asked for building plans for barns and houses, and chicken-pens, and wanted to know how to ventilate their stables and how to dispose of sewage and how to instal an electric lighting plant. They asked what kinds of feed could be grown to make pasture and winter feed for stock. They asked whether alfalfa or sweet clover or brome grass or winter rye was to be recommended, and if alfalfa, for example, should be sown with a nurse crop or without it.

The College forced to become an experiment station: The college soon discovered that the same questions had been asked, and answered, in the older provinces of Canada, and in the States to the South. The questions had been put in the form of scientific experiment and investigation, applied to soils and crops and farm

animals at experiment stations established for the purpose. The answers had been published in the form of bulletins, and these were available for use in Manitoba. But it was found that the same questions put to the soil and climate of Manitoba by scientific investigation would not receive the same replies as had been given by other soils and climates. And so, if the answers to be given to these many inquiries from the farmers of Manitoba were to be dependable and not misleading, it was necessary that the college should establish an experiment station of its own.

A Few Lines of Investigation

The Poultry Department is carrying the experimental idea into every pen of poultry. Records are kept of feeding, breeding, hatching, fattening, and egg production.

Two years ago mongrel hens were bought and mated with pure bred Plymouth Rock cockerels. A record of the egg production was kept that year, and also the next year with the progeny of that flock. The result so far has been to produce a flock of uniform coloring, increased size and increased egg production.

The heaviest laying Barred Rock on the plant in 1918-19 laid 235 eggs in the year. Four cockerels, progeny of this prize bird, were used for breeding in 1919. Eight of her pullets are in one pen and all of them give promise of being as good as their mother. One of these pullets laid twenty eggs, and another twenty-four eggs in twenty-four days when the weather was favoring us with a temperature of 25 degrees below zero.

The results demonstrate the value of

good breeding, and in addition, by this careful breeding and selection, superior strains of poultry are being produced.

Native Plums: Out of several experiments, the results with plums may be mentioned. In the College orchard are about one hundred selected native plum trees, the product of several years of careful selection. In 1919 a number of these trees gave heavy yields of fruit of good size and quality. These trees being of native origin, are vigorous and hardy. The pips from a large number of the best specimens of the fruit have been kept, and will be planted in the spring.

Ensilage—Corn and Sunflowers:

Just now a feeding test with ensilage is going forward. One lot of dairy cows are fed with corn ensilage, and another lot with sunflower ensilage. It is expected that some important results will be obtained. In order to check these results, the Chemistry Department is analysing the two fodders.

A rust-resistant strain of Marquis Wheat: Whether or not any method will be devised for the direct control of rust is uncertain. The better chance seems to be offered by way of producing, either by selection or cross-breeding, a strain of wheat less liable to rust than the existing varieties. In 1919 on the college plots a strain of selected Marquis wheat yielded twenty-nine bushels to the acre, while alongside this a check-plot of a commercial strain of Marquis yielded twenty bushels to the acre. It is not claimed that a rust-free strain has been

produced, for there was considerable rust present, but the result indicates a promising line of investigation.

Fibre Flax: It is desirable to encourage a greater variety of crop production and farm management generally in Western Canada.

The prospect of producing flax for fibre in Manitoba is said by experts to be excellent. A selection of fibre flax made in 1917 on the college plots produced in 1918 and again in 1919 ten inches more stem than the variety from which it was selected.

Sudan Grass: The Field Husbandry Department reports: "Sudan Grass is an annual grass which we have been growing for several years, and the results have been so remarkable that we feel justified in recommending its introduction among our annual hay and pasture crops. In 1919 it produced eleven tons of green weight per acre and three tons 1,365 pounds of cured hay, and has produced on a three year average three tons 969 pounds of cured hay per acre."

Hybridizing Alfalfa: Alfalfa grows well in the Red River Valley, and in many other parts of Manitoba. Some important strains have proved hardy and vigorous in growth. What we need, however, is a native strain. The imported varieties produce seed very sparingly, and without seed-bearing quality there can be no native strain. A cross was first made between an alfalfa plant of the hardiest and best

strain known and the common wild clover called Black Medick. The seed produced from the cross was sown, and, from the hybrid plants resulting, seed has been produced and selections made year by year with the hope of selecting finally a strain that was hardy, strong in growth and that would produce abundance of seed. In 1917 one plant of the required qualities produced six ounces of seed. In 1918 this seed was sown on a small plot and in 1919 the plot produced thirty pounds of seed, multiplying by eighty-fold the seed sown in 1918. There are strong hopes that the problem is solved of breeding and selecting a strain of alfalfa that stands the Manitoba climate, that yields abundantly, and will enable farmers to raise their own seed.

EXTENSION

Correspondence: It was the correspondence — an important part of the college extension activities—that made it necessary to commence and to extend research. Correspondence is a line of work which comes without being sought. A farmer in difficulty will send out an S.O.S. call, and it is very gratifying that, in numbers increasing every year, the farmers write to the college for information and direction.

Bulletins: The frequency of inquiries on a single subject,—for example, diseases of the horse, or rust in wheat, or seed selection—will suggest the need of prepar-

ing a bulletin on that subject. The bulletin deals with the question more fully than a letter can, and when there is a bulletin that answers an inquiry it is always sent out. The bulletin is an extension of correspondence.

Seed-testing: The number of samples of seed sent to the college to be tested is now so great that a laboratory is set aside for the purpose, and a special appropriation is made this year to pay for services and supplies. The college reports on the germinating percentage, the vigor of growth, the amount and kinds of weed seeds found in the sample. The report gives direction for cleaning if needed. The work of the college in seed selection emphasizes more and more each year the importance of sowing clean, vigorous seed.

Correspondence Course: For those who cannot come to college and wish to follow some special lines of study, study material is furnished in the form of bulletins, text books and study papers. Questions are prepared, and in writing the answers to the questions the students are guided to careful reading of the text-books. There are as many students on our correspondence list now as we can handle with the present teaching and office staff, since naturally the work is heavier in the winter when the regular courses are going on.

Attending Meetings: Outside engagements which the college staff accept total a very considerable number during the year. None of these engagements are

sought, and sometimes we are compelled to decline invitations through pressure of college work. Attending meetings in the country, however, affords the members of the staff the opportunity of learning the real problems that the people have to face, as well as of telling what the college stands for.

Sale of Improved Seed and of Pure Bred Stock: With so many good breeders of live-stock as there are in Manitoba, there is perhaps little if any need for the college to enter the market with pure-bred stock. The sale of live stock has not been made a specialty, and only the surpluses of small herds and flocks have been available for sale. In seed grain, however, there is less done in Manitoba in breeding and selection than is done in live-stock. There is a promising field of enterprise in producing good seed of the approved varieties of grain, clovers and grasses. And it is possible that South Western Manitoba may find a profitable business in raising corn for seed. Meantime the college is attempting to find what are the approved varieties of these various crops, and how best to grow them; and it has been able to dispose of a considerable amount of seed grain.

THE COLLEGE RESIDENCE

Naturally in setting forth what the college has to offer intending students, one first speaks of the courses of instruction. The instruction given is the obvious and important service of a college. The ad-

vantages which the students gain, however, and the attractions which bring students back year after year, are not limited to the courses of instruction. The residence life, and all that it implies, increases the attractions of the college very considerably. A significant feature in the college attendance is the frequency with which two or three or more members of one family are found in the student body. There come to mind now, without consulting the records, the names of sixteen families which, within the last four years, have sent forty students to the college, twenty-three of whom have been in attendance in 1919-20. It is a matter of common knowledge that those who have been at the college are able to induce their brothers and sisters to return next year with them. The inducements offered are contained in the accounts which they give of the interesting and pleasant college life.

The particular features of the residence life that deserve mention are these; athletic, literary, social and co-educational and religious. It should be remembered that all these opportunities are shared equally by both boys and girls.

Athletics: The residence is furnished with two swimming pools, and two gymnasiums, one for each half of the dormitory. Hitherto gymnasium instruction has been supplied only for the girls, but it is the intention for next year to engage a fully qualified instructor, or, if necessary, two instructors, who will teach swimming and gymnasium exercises, and also coach the football and basketball teams. The one football ground will be supplemented by a

second one to be put in order this summer. There are also a curling rink, built in 1919, and an open air skating rink kept in order by the Students' Co-operative Association.

Literary: A large and beautiful auditorium, with a seating capacity of 1,200, besides the numerous classrooms, affords ample opportunity for the meetings of literary societies and debating clubs. In the debating, the discussion of questions of public interest, and the management of business connected with such gatherings, the students receive valuable training in citizenship. Incidentally, the Agricultural College has succeeded in winning the inter-collegiate debating shield for several years in succession.

Social and co-educational: In the classrooms, in the dining-room, each morning at chapel, and in all the social functions arranged by the students themselves, the boys and girls meet and mix in an entirely natural way. Friday evening of each week is set aside for social, literary, and athletic affairs. Dancing—that oft-debated, much condemned and somewhat seductive practice—is permitted publicly on one or two occasions each term. The attitude of the college on the subject of dancing is this: the boys and girls, many of them, have danced before coming to college, will dance again, and should dance. The thing for parents, guardians, or teachers to do, is not to stand off and condemn the practice and at the same time allow the boys and girls to dance under a sense of condemnation, and to dance most of the night in a public

hall without any supervision; but to patronize, supervise and attend the dance themselves, and keep it in due bounds. At the Agricultural College, the teaching staff—men and women,—mingle with the students in their social affairs and their dancing. The dances begin at eight o'clock, and close sharp at eleven, and are always supervised. We recommend that plan for country and town dances.

Religious: It may fairly be claimed that the whole atmosphere of the college is religious, though not theological. Right ideals of conduct and right principles of character are upheld. Not to mention the examples and influence of the teaching staff, which in the main are all to the good, the senior students, who have been at the college from three to five years, are a select body of men and women. They have been selected by a natural process, in which perseverance, brains and character all count. The student executive committees, which practically have charge of the discipline in the residence, are dominated by the senior students. In the general discipline of the college, the attendance at classes, the granting of leave of absence, the supervision of conduct generally, the college management aim to carry out what they think the parents would desire for their children, in the matter of wise supervision and direction.

So much for the general moral tone. The specific religious direction is given in the chapel service each morning of the week, consisting of singing, reading of scripture lessons and prayer; the religious service on Sunday afternoon with a sermon by a

clergyman who has been invited for the occasion; and the Y.M.C.A. and Y.W.C.A. organizations, which conduct bible classes and generally interest themselves in the religious welfare of the students.



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